

# INTERNATIONAL SEARCH REPORT

International Application No PCT/JP92/00639

<b>I. CLASSIFICATION OF SUBJECT MATTER</b> (if several classification symbols apply, indicate all) <sup>1</sup>		
According to International Patent Classification (IPC) or to both National Classification and IPC		
Int. Cl <sup>5</sup> B21B13/14		
<b>II. FIELDS SEARCHED</b>		
Minimum Documentation Searched <sup>7</sup>		
Classification System	Classification Symbols	
IPC	B21B13/00-13/04, 13/14	
Documentation Searched other than Minimum Documentation to the Extent that such Documents are Included in the Fields Searched <sup>8</sup>		
Jitsuyo Shinan Koho		1926 - 1991
Kokai Jitsuyo Shinan Koho		1971 - 1991
<b>III. DOCUMENTS CONSIDERED TO BE RELEVANT <sup>9</sup></b>		
Category <sup>10</sup>	Citation of Document, <sup>11</sup> with indication, where appropriate, of the relevant passages <sup>12</sup>	Relevant to Claim No. <sup>13</sup>
Y	JP, A, 58-187207 (SMS Schloemann-Siemag AG.), November 1, 1983 (01. 11. 83), Lines 4 to 17, upper left column, page 5 & EP, A1, 91540 & US, A, 4519233 & DE, A1, 3213496	1-12
Y	JP, A, 62-282717 (Kawasaki Heavy Industries, Ltd.), December 8, 1987 (08. 12. 87), Line 11, upper right column to line 5, lower right column, page 4 (Family: none)	1-12
Y	JP, A, 59-56905 (Kawasaki Steel Corp.), April 2, 1984 (02. 04. 84), Lines 4 to 11, lower left column, page 1 (Family: none)	1-12
A	JP, A, 54-13442 (Hitachi, Ltd.), January 31, 1979 (31. 01. 79), Line 19, loer left column to line 11, lower right column, page 4 (Family: none)	1-12
<sup>10</sup> Special categories of cited documents: "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier document but published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art "G" document member of the same patent family		
<b>IV. CERTIFICATION</b>		
Date of the Actual Completion of the International Search		Date of Mailing of this International Search Report
August 7, 1992 (07. 08. 92)		August 18, 1992 (18. 08. 92)
International Searching Authority		Signature of Authorized Officer
Japanese Patent Office		

Form PCT/ISA/210 (second sheet) (January 1985)

**THIS PAGE BLANK (USPTO)**

## INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP2004/013623

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 B21B13/14 B21B13/02

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 B21B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	SHIGEMATSU K ET AL: "ADVANCED TECHNOLOGIES OF THE NEW VOLD STRIP MILL AT KASHIMA STEEL WORKS" CAHIERS D'INFORMATIONS TECHNIQUES DE LA REVUE DE METALLURGIE, REVUE DE METALLURGIE. PARIS, FR, vol. 92, no. 6, 1 June 1995 (1995-06-01), pages 795-803, XP000527745 ISSN: 0035-1563 page 797; figure 1 ----- -/--	1-9



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

## \* Special categories of cited documents :

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

- \*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \*G\* document member of the same patent family

Date of the actual completion of the international search

2 March 2005

Date of mailing of the international search report

10/03/2005

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

Forciniti, M

# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/EP2004/013623

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	JOJIMA K ET AL: "DEVELOPMENT OF THE PRODUCTION OF HIGH THICKNESS-UNIFORMITY SHEET IN THE NEW TANDEM COLD STRIP MILL AT KASHIMA STEEL WORKS" CAHIERS D'INFORMATIONS TECHNIQUES DE LA REVUE DE METALLURGIE, REVUE DE METALLURGIE. PARIS, FR, vol. 93, no. 11, November 1996 (1996-11), pages 1421-1429, XP000640073 ISSN: 0035-1563 page 1421; figure 1 -----	1-9
A	EP 0 555 882 A (HITACHI, LTD) 18 August 1993 (1993-08-18) abstract; figure 1 -----	1,5
A	DE 100 37 004 A1 (SMS DEMAG AG) 28 February 2002 (2002-02-28) the whole document -----	1-9
A	EP 0 543 014 A (KAWASAKI STEEL CORPORATION; KAWASAKI STEEL CO; JFE STEEL CORPORATION) 26 May 1993 (1993-05-26) figures 1-56 -----	1,5